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| 10/083,093 | 02/26/2002 | Jeffrey J. Shea | 10557/266546 | 5422 |
| 30559 | 7590 | 04/15/2008 | | |
| CHIEF PATENT COUNSEL | | | EXAMINER | |
| SMITH & NEPHEW, INC. | | | RAMANA, ANURADHA | |
| 1450 BROOKS ROAD | | | ART UNIT | PAPER NUMBER |
| MEMPHIS, TN 38116 | | | 3733 | |
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| | | | 04/15/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/083,093 | SHEA ET AL. |
| Examiner | Art Unit | |
| Anu Ramana | 3733 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 January 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 47-58 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 47-52 and 55-58 is/are rejected.
 7) Claim(s) 53 and 54 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11/20/06 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date ____.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date, ____.
 5) Notice of Informal Patent Application
 6) Other: ____.

DETAILED ACTION

Claim Objections

Claim 58 is objected to because of the following informalities. It appears that the claim should depend on claim 57. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 47-50, 52 and 56-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Marchetti et al. (US 5,156,625).

Marchetti et al. disclose an implantable prosthesis including: a metal shell or "prosthetic component" 3; at least one opening extending from a first surface to the second surface of component 3, the opening having a nonthreaded frustoconical upper portion and a lower portion; a screw or "insertion member" 14 with a rounded non-frustoconical contact surface that contacts the frustoconical taper section of the opening and does not contact the lower portion of the opening (Fig. 4, col. 2, lines 39-68 and col. 3, lines 1-44). See marked up Fig. 4 from Marchetti et al. on the following page.

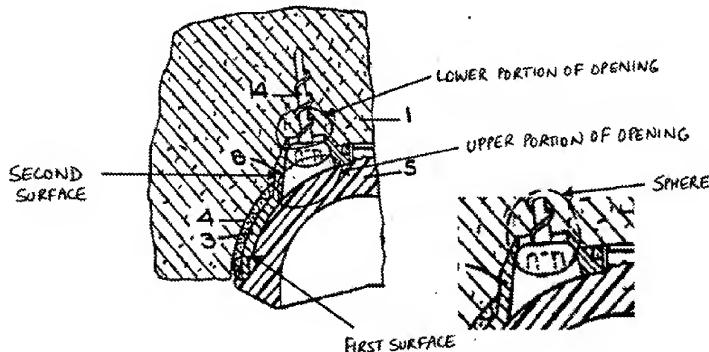
Regarding the limitation, "comprises a slice of a sphere, wherein when the insertion member is inserted into the opening, a portion of the slice contacts the frustoconical taper section," the Examiner notes that the claim language only requires some portion of the non-frustoconical contact surface of the head of the insertion member to lie along a slice of a sphere and does not require the head to have a spherical undersurface. It is the Examiner's position that imaginary spheres could be picked such that at least a portion of the non-frustoconical contact surface of the head

of the insertion member 14 lies along a slice of a sphere wherein the slice contains the center point of the sphere.

Regarding the limitation, "in a substantially fluid tight relationship" it is noted that the head of screw 14 forms a seal by the head of the screw abutting against the conical surface of the opening. Turning to Applicants' specification to determine what constitutes a "substantially fluid-tight seal," at page 23, line 21 and page 24, lines 1-2, Applicants' disclose that a head of an insertion member should be received and locked in a screw hole to provide "at least a partial seal." The screw 14 of Marchetti et al. forms "at least a partial seal" by being received and locked in the opening and thus fits in the opening in a "substantially fluid tight" relationship.

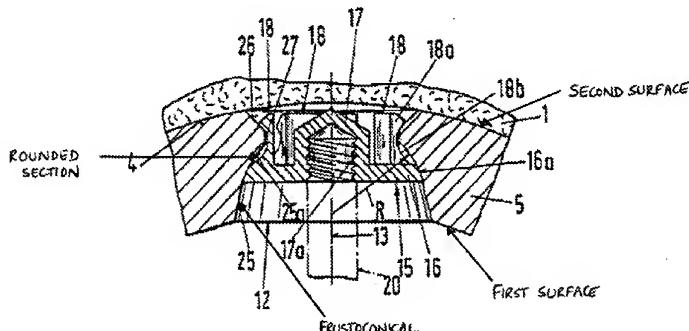
The rounded surface of the head of insertion member 14 is a slice or portion of a sphere as shown in marked up Fig. 4 below.

It is noted that the head of screw 14 abuts on the conical inner wall and thus provides a liquid-tight seal in that there is no opening or gap at the locking interface.



Claims 47-52 and 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Oehy et al. (US 5,645,606).

Oehy et al. disclose an acetabular shell or cup 5 having: a first surface, a second surface oriented toward bone; openings 12 extending from the first surface to the second surface wherein each opening 12 has an extended nonthreaded frustoconical taper section 25, a rounded section with a concave surface 25a beginning at a narrow end of the frustoconical section; each opening 12 capable of receiving any type of fastening element or insertion member; an insertion member 14 having a head with a spherical undersurfaces 14a seatable in surface 25a in a plurality of angular positions (Figs. 1-2, col. 2, lines 45-67, col. 3 and col. 4, lines 1-6). See marked up Fig. 2 below.



Regarding the limitation, "comprises a slice of a sphere, wherein when the insertion member is inserted into the opening, a portion of the slice contacts the frustoconical taper section," the Examiner notes that the claim language only requires some portion of the non-frustoconical contact surface of the head of the insertion member to lie along a slice of a sphere. It is the Examiner's position that imaginary spheres could be picked such that at least a portion of the non-frustoconical contact surface lies along a slice of a sphere wherein the slice contains the center of the sphere.

Regarding claim 50, Oehy et al. disclose that their acetabular prosthesis including an outer shell 5 and an inner shell or "liner" 6 is used as a joint socket 2 in a

hip joint prosthesis wherein a joint head 3 is fastenable in a femur by a shank part or "stem" and articulates with joint socket 2 (Fig. 2 and col. 2, lines 28-31).

Response to Arguments

Applicant's arguments submitted under "REMARKS" in the response filed on January 17, 2008 have been fully considered.

Applicant's amendments overcome the rejection under 35 USC 112 second paragraph made in the previous office action. Accordingly, this rejection is being withdrawn by the Examiner.

Applicant's arguments with respect to the rejections of claims 47-50 and 52 under 35 USC 102(b) as being anticipated by Marchetti et al. are not persuasive because an imaginary sphere could be drawn such that at least a portion of the non-frustoconical contact surface of the border or rim of the head of the insertion member lies along a slice of the sphere wherein the slice contains the center point of the sphere.

Applicant's arguments on page 8 of "REMARKS" that Marchetti et al. fails to disclose the structural limitation, "the contact between the non-frustoconical contact surface of the head and the frustoconical taper section.....creates a self-locking relationship between the insertion member and the opening so that the insertion member and the prosthesis form a rigid physical construct at each of the angles" are not persuasive. It is the Examiner's position that the insertion member 14 can be angulated within the opening such that the head of the insertion member forms a substantially fluid tight seal with the opening.

Applicant's arguments with respect to the rejections of claims 47-52 under 35 USC 102(b) as being anticipated by Oehy et al. are not persuasive for the following reason. Fig. 1 of Oehy clearly discloses the insertion member 14 to have a head with a spherical undersurface. It is the Examiner's position that an imaginary sphere could be drawn such that at least a portion of the non-frustoconical contact surface of the border or rim of the head of the insertion member lies along a slice of the sphere wherein the slice contains the center point of the sphere. The Examiner also notes that Fig. 2 of

Oehy is being used to illustrate the geometry of the through-hole 12 since Fig. 1 does not clearly illustrate the geometry of the through-hole. The Oehy et al. insertion member 14 is capable of angulating within through-hole 12 such that a portion of the contact surface of the head of the insertion member contacts a frustoconical taper section of the opening.

Allowable Subject Matter

Claims 53 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR
April 12, 2008

*/Anu Ramana/
Primary Examiner, Art Unit 3733*